**IEEE P802.15**

**Wireless Personal Area Networks**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title | **Some CID resolutions for D2** | |
| Date Submitted |  | |
| Source | Stephan Berner  PureLiFi | Voice: [ ] Fax: [ ] E-mail: [ ] |
| Re: |  | |
| Abstract |  | |
| Purpose | Aid comment resolution | |
| Notice | This document has been prepared to assist the IEEE P802.15. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by P802.15. | |

# CID 619:

*Insert a new subclause “LB-PHY MCS element” after 6.6.20 with the following content:*

The LB*-PHY MCS* element holds a subset of supported MCS for the LB-PHY.

**Figure X LB-PHY MCS element**

|  |  |
| --- | --- |
| **1 octet** | **1 ocet** |
| Clock Rates | MCS |

**Clock Rates:** A bitmap indicating the set of supported OCRs. A 1 in the bitmap indicates that the given OCR is supported. A 0 indicates that the OCR is not supported. Table X1 shows the bitmap structure.

**Table X1 Clock rate bitmap**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | processed first | | | | processed  last | | | | |
| **Bits in the bitmap:** | 0 | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| **Clock Rate:** | 1 MHz | 2 MHz | 4 MHz | 8 MHz | | 16 MHz | 20 MHz | 25 MHz | 1. MHz |

**MCS:** A bitmap indicating a set of supported MCSs. A 1 in the bitmap indicates that the given MCS is supported. A 0 indicates that the MCS is not supported. Table X2 shows the bitmap structure.

Table X2 MCS bitmap

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | processed first | | | | processed last | | | | |
| Bits in the bitmap: | 0 | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |
| MCS: | 0 | 1 | 2 | 3 | | 4 | 5 | 6 | 7 |

# CID 622:

*Delete the text P68L3-11*

*Change figure 64 as follows:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 8 octets | 2 octets | 2 octets | 6 octets | 2 octets |
| Timestamp | Random  Access  Interval | Capability  Information | OWPAN  ID | LB-PHY MCS element |

Figure X Random Access element

*Replace P68L22-25 with the following text:*

**LB-PHY MCS element:** The LB-PHY MCS element, defined in XXX, containing the supported clock rates and MCS.

# CID 668:

*Insert the following text after P33L6:*

If the ACK bit in the frame control field is set, then following ACK and retransmission procedure is applied.

*In P33L11, replace* „4“ by *macMaxFrameRetries*

*Insert the following text after P33L12:*

If the ACK bit is not set, the packet is transmitted only one time and the absence of an ACK is ignored.

*Change text in P106L12-13 as follows:*

The sequence number field contains the 12-bit sequence number associated with the MPDU in the payload. Hence, it is equal to the Sequence Number field of the MPDU's Sequence Control field.

# CID 728:

Remove bitloading …

# CID 731:

*Replace P112L18 “The information… “ to P112L23 “… light interference” with the following text:*

Subcarriers with negative indices -28 to -3 are loaded with 24 data symbols and two pilots. The pilots are located at index -21 and -7.

Subcarriers with positive indices 3 to 28 are loaded with the conjugate complex of the data and pilot symbols at the negative indices.

The pilot symbols have all value 1. Subcarriers with indices -2, -1, -1, 2 are set to zero in order to avoid possible low-frequency distortion in the system due to baseline wandering and background light interference.

Subcarriers -31, -30, -29, 29, 30, 31 are set to zero because those are near the bandedge of the lowpass filters in the system and may get attenuated excessively. Subarriers with index 0 (DC) and 32 are also set to zero.